



MULTI-TEMP

PREMIUM, PASSENGER CAR ENGINE OIL

June 2013

Multi-Temp passenger car engine oils are engineered for maximum protection of gasoline passenger cars and are formulated to provide both the low temperature start-up and high temperature viscosity protection.

In service **Multi-Temp** oils offer the following benefits:

- ◆ Meet warranty requirements for all gasoline powered vehicles
- ◆ Meet warranty requirements for propane and natural gas fueled light duty vehicles
- ◆ Meet latest fuel economy standards
- ◆ Meet requirements for turbo-equipped gasoline engines
- ◆ Excellent wear control for longer engine life
- ◆ Longer exhaust catalyst life from improved volatility and reduced phosphorus levels
- ◆ Improved low temperature start-up performance
- ◆ Lower oil consumption from low volatility formulation

Product Applications

Multi-Temp is available in 0W-20 Synthetic Blend, 5W-20, 5W-30 and 10W-30 grades. The 0W-20, 5W-20, 5W-30 and 10W-30 grades exceed the requirements for Resource Conserving ILSAC GF-5, as well as older service level GF-4. All grades meet the requirements of API SN and are recommended for applications requiring API SL or SJ. **Multi-Temp** is recommended for engines using gasoline, propane and natural gas as fuel.

Multi-Temp 0W-20 Synthetic Blend is a high-quality synthetic blend motor oil engineered to help improve fuel economy in vehicles where it is recommended, including many late model Japanese manufactured vehicles, that require a SAE 0W-20 oil.

Most late model North American built cars that specify a 5W-20 or SAE 5W-30 grade engine oil for use year-round. SAE 0W-20, 5W-20 and 5W-30 offer optimal performance for wear protection, fuel economy, oil consumption control, cold starting and warm-up lubrication.

SAE 10W-30 grade oil is recommended for summer use in older or higher mileage cars that have been using either of these grades for most of their operating lives.

All grades of **Multi-Temp** contain a potent friction modifier for improved fuel economy. The 0W-20, 5W-20, 5W-30 and 10W-30 grades meet the highest level of fuel economy recognized by API.

Multi-Temp meets the requirements of the TEOST (Thermal-oxidation Engine Oil Stability Test) ensuring that the oil meets the severe deposit formation requirements of turbo-equipped gasoline engines.

Product Recommendations and Approvals

Multi-Temp engine oils are recommended for all gasoline and light duty natural gas and propane engines in both domestic and foreign cars and meet or exceed the requirements of:

- ◆ API SN/SM/SL/SJ
- ◆ ILSAC GF-5 (SAE 0W-20, 5W-20, 5W-30, 10W-30)
- ◆ Manufacturer's warranties for virtually all gasoline-powered cars trucks, vans and sport-utility vehicles sold in North America.

Product Maintenance and Handling

Multi-Temp engine oils are manufactured from high quality Group II base oil, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Special care is also recommended in handling used motor oils. Please refer to the Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.

Typical Properties

Multi-Temp Grade	0W-20	5W-20	5W-30	10W-30
API Service	SN	SN	SN	SN
ISLAC	GF-5	GF-5	GF-5	GF-5
Density @ 15°C, kg/m ³	844	861	861	866
Pour Point, °C	-48	-42	-39	-36
Flash Point, °C	218	218	224	234
Viscosity Index	165	155	158	140
Kinematic Viscosity, cSt				
@ 40°C	46.0	51	64	70
@ 100°C	8.5	8.8	10.8	10.8
TBN	7.2	7.2	7.2	7.2
Sulfated Ash, wt. %	.92	0.92	0.92	0.92

The typical properties shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.